

What I claim as my invention is:

1. In the production of a liquid food product from protein containing solid food, a method of inactivating enzymes which may produce off-flavor volatiles, comprising:
5 disintegrating the solid food in a liquid under a pressure higher than ambient pressure, and
 concomitantly heating resulting slurry to inactivate the enzyme.
- 10 2. The method according to claim 1, comprising a further step of raising the temperature of the slurry above 100°C while disintegrating.
- 15 3. The method according to claim 2, wherein the step of raising the temperature comprises a further step of injecting steam into the slurry while disintegrating.
- 20 4. In the production of a liquid food product from protein containing solid food, a method of inactivating enzymes which may produce off-flavor volatiles, comprising:
 disintegrating the solid food in a liquid under a pressure higher than ambient pressure under oxygen-free environment, and
 concomitantly heating resulting slurry to inactivate the enzyme.
- 25 5. The method according to claim 4, comprising a further step of raising the temperature of the slurry above 100°C while disintegrating.
- 30 6. The method according to claim 5, wherein the step of raising the temperature comprises a further step of injecting steam into the slurry while disintegrating.
7. A process of continuously producing a liquid food product from protein containing solid food, the liquid food product having substantially no off-flavor volatiles, comprising steps of:

disintegrating the solid food in water under a pressure higher than the ambient pressure to produce a slurry and simultaneously heating the slurry to cooking temperature;
holding the slurry for cooking under pressure for a preset duration of time at a preset temperature;
vacuum deodorizing the cooked slurry, and
extracting the liquid food product from the deodorized slurry.

8. The method according to claim 7, further comprising a step of:
raising the temperature of the solid food above 100°C while disintegrating.
9. The process of continuously producing a liquid food product, according to claim 8, wherein the step of cooking the food slurry comprises a further step of:
injecting steam under pressure into the food slurry; and
maintaining the steam/slurry mixture at a preset temperature for a preset duration of time.
10. The method according to claim 9, wherein the step of extracting is performed with a centrifugal extractor.
11. The process of continuously producing a liquid food product, according to claim 10, wherein the step of disintegrating and heating is carried out in oxygen-free environment.
12. A process of continuously producing a liquid food product from protein containing solid food, the liquid food product having substantially no off-flavor volatiles, comprising steps of:
disintegrating the solid food in water under a pressure higher than the ambient pressure to produce a slurry and simultaneously heating the slurry to cooking temperature;
holding the slurry for cooking under pressure for a preset duration of time at a preset temperature;
extracting the liquid food product from the cooked slurry; and
vacuum deodorizing the liquid food product.

13. The method according to claim 12, further comprising a step of:
raising the temperature of the solid food above 100°C while disintegrating.

5 14. The process of continuously producing a liquid food product, according to
claim 13, wherein the step of cooking the food slurry comprises a further
step of:

10 injecting steam under pressure into the food slurry, and
maintaining the steam/slurry mixture at a preset temperature for a
preset duration of time.

15 15. The process of continuously producing a liquid food product, according to
claim 14, wherein the step of disintegrating and heating is carried out in
oxygen-free environment.

16. A system for continuously producing a liquid food product from protein
containing solid food while inactivating enzymes which may produce off-
flavor volatiles in a liquid food product, comprising:

20 a mechanical centrifugal grinder for grinding the solid food in a
liquid under a pressure higher than ambient pressure to produce a
food slurry;
a steam supply for supplying steam to the mechanical grinder to
raise the temperature of the solid food to a preset temperature;
25 a holding tube for holding the food slurry under pressure at a preset
temperature for a preset duration of time to cook the food slurry;
a vacuum deodorizer for removing the off-flavor volatile from the
cooked slurry, and
an extractor for separating the liquid food product and solid residue
from the cooked slurry.

30 17. The system for continuously producing a liquid food product according to
claim 16, wherein the extractor is of a centrifugal type.

35 18. The system for continuously producing a liquid food product according to
claim 17, further comprising:

a plurality of positive displacement pumps to ensure transfer of preset amount of food slurry and cooked slurry and to maintain pressure differences among the grinder, holding tube, vacuum deodorizer and the extractor.